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Photograph courtesy of Yiangou Architects.

WHY CHOOSE BRONZE

The qualities of bronze have been known to man since the beginning of the Bronze Age over 4,000 years ago. The Romans were the first to use bronze in cladding doors. However, it took until the Middle Ages before bronze became more widely used for architectural purposes. There are bronze doors dating back to the 15th century, demonstrating the durability of this material, although the majority of buildings which feature architectural bronze windows, doors and other decorative features date from the 18th and 19th century.



Our extrusions comprise of a high tensile manganese brass alloy, termed architectural bronze, which is recognised for its particular suitability for use in architecture.

Available in two tones and with its rich patina, Architectural Bronze makes an ideal choice for those looking for a luxury product.

The aesthetics of Bronze when considered with its sustainability, strength and durability, are a combination that will prove to be a long term investment to your home or project.



Etruscan Chimera di Arezzo - 400 BC



ARCHITECTURAL BRONZE

HANDMADE

There is something quite special about having products handmade to your own specifications. Hand crafted bronze windows, doors and screens add to the character of a property and with our expertise you can be creative with your project. We are widely recognised for our bespoke manufacturing and our passion is in our attention to detail, tailoring designs to suit your very specific requirements, however large or small your project may be.

WHY CHOOSE ARCHITECTURAL BRONZE

We offer a unique and diverse range of products and over the years they have been specified for the conservation of historic buildings through to applications in contemporary architectural styles. Our bronze products are the preferred choice for many architects, builders and homeowners. We are proud to have been involved in many award winning and prestigious projects, old and new, both in the UK and worldwide.

VISIT US

To truly appreciate this beautiful metal, our bronze should be seen first-hand and we encourage everyone to visit us. Our premises are impressive and we can show you around our showrooms, design studios and factory. Here you will experience every stage of the complex manufacturing and finishing process, visit the departments and meet the teams involved. We offer a personal service to all our customers and are proud that much of our work comes from recommendations and repeat business.

This brochure has been designed to demonstrate the versatility of our products and provide you with ideas for your own project.

Advanced casement with Scroll handle, Bradley backplate, Swan neck stay and Fleur-de-lys peg with locking nut, shown here.







BRONZE WINDOWS

Whether you are replacing existing damaged and draughty windows, or have a new build project looking for a stylish and unique fenestration, we can provide bronze window systems with attractive profiles and fine sightlines that will suit both traditional and contemporary projects.

Most windows come with a rebate or equal leg option. Further options include a choice of handles, backplates and stays, security and safety features.

See technical pages for further information.

ADVANCED SYSTEM

An outward opening window designed with a decorative traditional or contemporary bead to the outside of the window which simplifies the glazing process over silicone pointing. Can be designed with horizontal and vertical transoms and shallow curves.

ADVANCED INWARD SYSTEM

Has all the features of the Advanced system but windows are fitted, glazed and beaded from the inside, ideal for windows difficult to access and clean.

THERMABRONZE SYSTEM

This thermally broken system incorporates two thermal breaks, yet maintains fine sightlines and detail. It can be made with horizontal and vertical transoms and is fitted with the traditional bead.

HERITAGE SYSTEM

The simplest, most delicate and adaptable of our extrusions. It can be bent to form tighter curves and also be divided with horizontal and vertical transoms. It is the only system that will accept single glazing and traditional leaded lights.

EURO INWARD OPENING SYSTEM

Based around the principles of European window design, the Euro Inward will accept the deepest double glazed unit of all our systems. Windows are fitted, glazed and beaded from the inside, ideal for windows difficult to access and clean.

WINDOWS RESIDENTIAL



Heritage windows fitted with leaded lights and kiln distorted glass.



Double glazed Heritage windows with horizontal transoms.



Renovation of a Victorian property with replacement windows.





Old draughty painted steel windows have been replaced with bronze casements within the stone mullions.



Renovation of an interesting property incorporating extensive use of the Advanced System in the windows and doors.



Refurbishment of a country house including two new gables. Windows feature shaped heads, horizontal and vertical transoms.



A corridor of glass is created with generously proportioned bronze windows with vertical transoms set within an oak framework.



A Tythe barn conversion is transformed with replacement windows and a glazed screen using our Advanced System.



Bronze casements set within mullions complement the clean lines and elegance of this manor house.



Replacement of old steel windows with more energy efficient bronze casements, maintain the period characteristics of this property.



Advanced bronze casements are fitted into timber and stone openings in this charming Arts and Crafts property.







WINDOWS RESIDENTIAL



Abutting opening windows fitted to the building seen right.



Large walls of glass are created with fixed and opening casements.

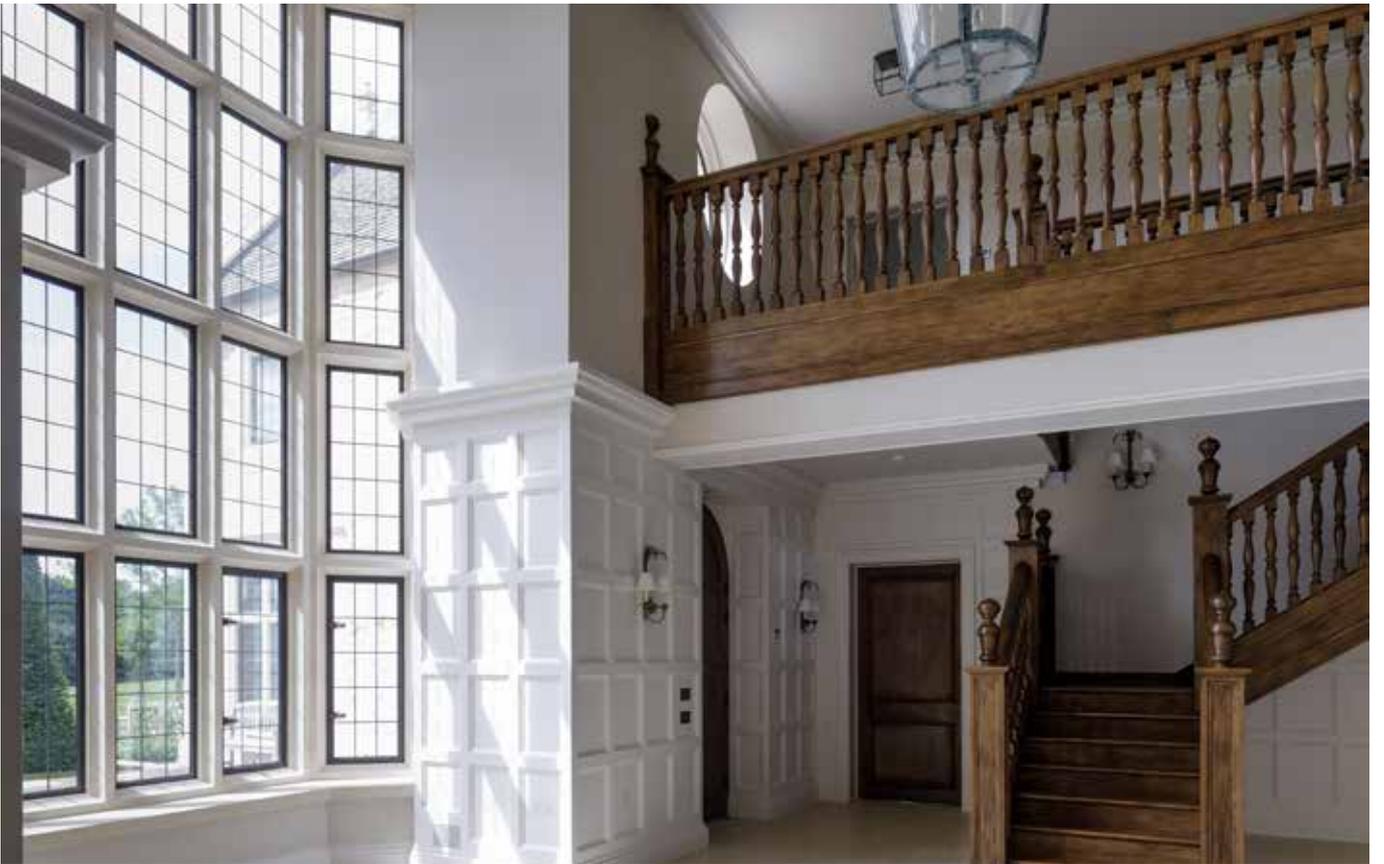


Thermabronze system is fitted in this impressive new leisure annexe.





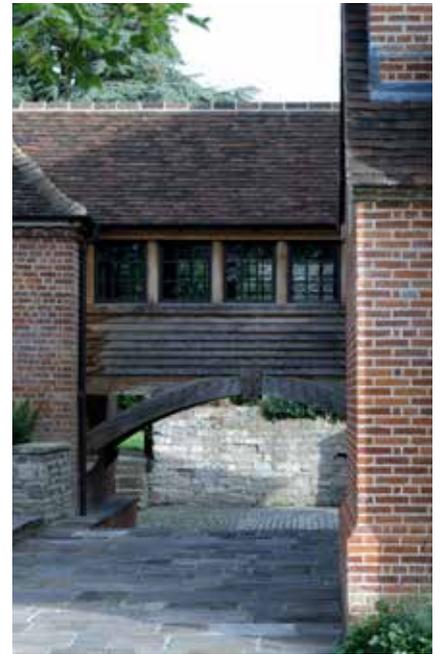
A sympathetically designed modern addition to a Georgian house, combines traditional elegance with contemporary aesthetics.



Impressive new build featuring Advanced and Heritage windows set in stone mullions with applied lead detailing.



All photographs are courtesy of Yiangou Architects.



Building designed for the enjoyment of music. The room features large faceted windows, doors and an impressive wall of glass.



All photographs are courtesy of Yiangou Architects.



New property designed with feature windows and an aspect to enjoy the spectacular views. Heritage windows throughout.



Generously proportioned windows to this new build include horizontal and vertical transoms, configured so not to spoil the views.



A substantial country residence built from Gloucestershire stone. Windows have horizontal transoms and traditional ironmongery.





Photograph courtesy of Histon Alvey Architects.

Bronze windows are set into timber frames and directly into green oak.



And below. Photographs courtesy of Harrison Sutton Partnership.

An enchanting new property built on the coastline in the south of England.



Thermabronze windows look out onto spectacular views.



An impressive new build with Advanced casements and timber sub-frames. See also below and page 6.



Entrance to the building at top of this page with a string of windows to the hallway and landing above.



Quality and meticulous attention to detail can be seen in this new property.





And Left. Photographs courtesy of www.lyndondouglas.com







BRONZE DOORS

For many of our clients already investing in bronze windows and screens for their project, the addition of bronze doors will maintain consistency of style, whilst providing an impressive entry to a room or building.

Combining richness of material, striking aesthetics and many other features found in our windows, we offer various bronze door systems which can be individually tailored to suit your project.

See technical pages for further information.

STANDARD BRONZE DOOR SYSTEM

An adaptable door system that can be shaped and designed with horizontal and vertical transoms. Traditional or contemporary bead allows flexibility to suit your project style

DOUBLE CLAD BRONZE DOOR SYSTEM

The Thermabronze system is combined with a bronze clad timber core, resulting in a thermally broken door where the beauty of bronze is appreciated both inside and outside the room.

SINGLE CLAD BRONZE DOOR SYSTEM

The bronze Single Clad door system combines the durability of bronze to the exterior with the warmth of timber internally. A variety of timbers and paint or stain finishes can be used to complement your interior décor.

TIMBER DOOR WITH BRONZE INSERTS

Available in three profiles, many variations are achievable incorporating either the Advanced, Thermabronze or Heritage sections. They are also ideally suited for those projects where a folding door system is required.

SLIMLINE DOOR SYSTEM

This is a slender framework which can incorporate both horizontal and vertical transoms, be fitted with traditional or contemporary bead and is ideal for both internal and external locations.



Panels above the doors feature a decorative motif.



Bespoke ironmongery and suited locks were fitted on this project.





Elegant curved neoclassical facade is designed to include sets of doors with margin detail and clerestory panels above.



Dining room in the new property on page 22 & 23 is designed with multiple sets of doors, side lights and clerestory panels.



Matching doors to a different elevation.



Gable doors lead onto formal gardens.



Doors are set within a simple mullion frame with fixed lights above. Detail is kept to a minimum creating a contemporary look.



Extension with rooflight creating the feel of an orangery.



The room is fitted with full length doors and fixed panels.



Sets of bronze doors with curved heads and horizontal and vertical glaze bars, lead from this impressive room onto a balcony.



Mortice lock and Barrel handle.



Cremone bolts with lever handles.



Multipoint lock with Euro Scroll handle.



Doors and panels within a shaped opening contain horizontal and vertical transoms, fitted with kiln distorted glass.



Doors fitted with traditional door furniture and shoot bolts.



Sets of doors within screens at a restored Mill house.



Bronze doors to a London art studio with horizontal and vertical transoms and fitted with cremone ironmongery.



Bronze doors to a London property creating a contemporary and uncluttered look.



Doors acting as secondary glazing.



Doors are fitted with specialist hardware.



Bay incorporating full length panels and doors with leaded glass.



Bronze internal doors and windows let light into the adjoining rooms. Conservatory and floor grilles by Vale Garden Houses.



Intricate stonework frames large bronze doors with curved heads and leaded glass to form a traditional orangery.



Unusual contemporary style extension incorporating large Double Clad doors.



Pairs of Single Clad doors with bronze to the exterior have been fitted to a swimming pool extension.



Sets of arched painted doors with bronze inserts are fitted with traditional ironmongery. See also top of page 20.



A garden studio has been designed with full height fixed screens and generously proportioned doors.



Painted bi-folding timber doors with bronze inserts and leaded glass allow the room to open onto the garden.





BRONZE SCREENS

A light filled room is everyone's ideal and there is currently a renaissance in recreating bright and airy spaces with light filtering throughout the home.

As a consequence, screens are being specified with increasing regularity by designers and architects as a means of partitioning internal spaces, yet allowing an openness and transparency within. The result creates contemporary style zones, 'on trend' regardless of the period of building to which they are applied.

External screens will allow greater views of the outside, creating walls of light regardless of the shape or size of opening.

Our bespoke screens incorporate bronze frames from our Heritage, Advanced or Thermabronze window systems. This choice provides you with the ideal solution for your project and one that will harmonise with your architectural requirements, and often with other Bronze windows and doors specified on your project.

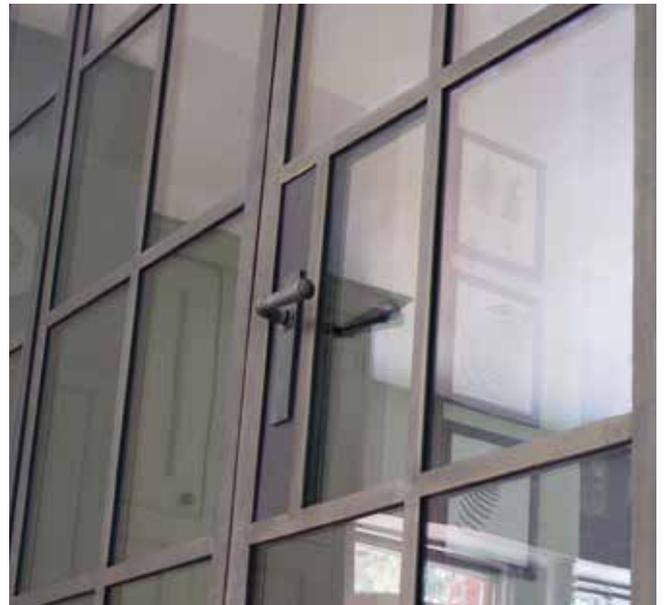
Bronze metal screens often incorporate an integrated door and we also offer various door systems for this purpose. For your individual project we recommend you contact us so we can provide a tailor made design that will meet your needs.



Internal bronze screens with bronze antiqued mirrored glass leading to a concealed cloakroom and hallway.



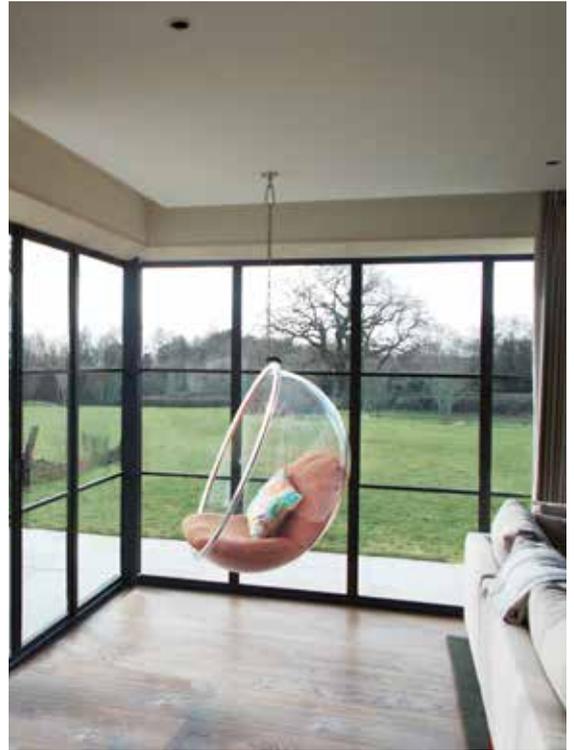
Picture shows the beaded side of a screen.



Picture shows the plain side of a screen.



A light filled open plan living space with a kitchen to one side.



An informal living area enjoys panoramic views.



An interesting contemporary new build. Multi faceted elevations are designed with bronze screens and feature windows.



A spacious and light environment is created providing areas for cooking, dining and relaxing.



Open plan extension to a London townhouse using the Advanced System.



Internal bronze screen with double doors and lower bronze panels.



Doors divide the kitchen from dining room on different levels.



Contemporary lakeside new build features a large bronze screen with single Slimline door leading to the kitchen and living area.



Simple contemporary bead.



Cloakroom interior with bespoke wallpaper panels fitted to the screen.



Double clad bronze door and screen with a lower bronze panel.



Slim door lock, handle and backplate.



A bronze glazed screen provides access to a garden room and allows light to flow between the rooms.





SECONDARY GLAZING

OUR SYSTEM

Our Bronze secondary glazing is a fully independent window system which is installed to the interior of an existing window opening and can be either openable, part removable or fixed. Our opening units are usually side hung and these allow access to the external window for cleaning and ventilation purposes.

THE BENEFITS OF SECONDARY GLAZING

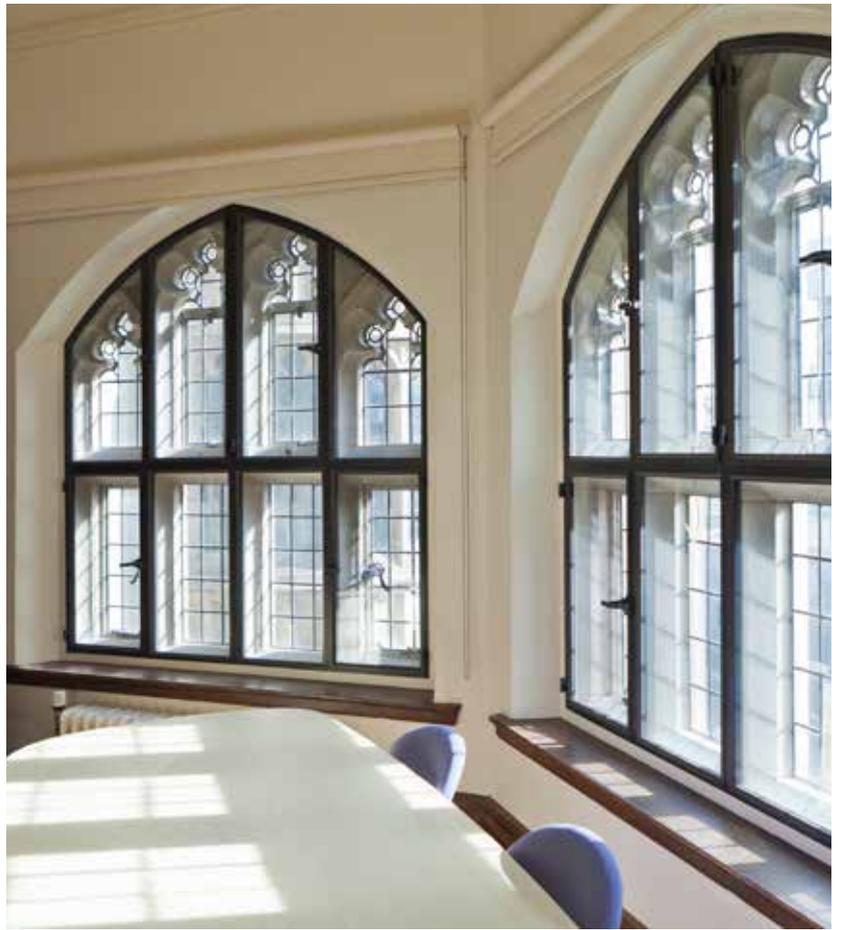
Secondary glazing provides the ideal solution for projects where it is essential to retain the integrity and provenance of existing windows, yet there is a requirement to improve thermal efficiency. Unlike many secondary glazing systems, double glazed units sit within our framework providing exceptional performance and draught-proofing. This has been readily proven in many educational establishments and domestic settings.

Secondary glazing will not only provide quality soundproofing, which is particularly beneficial in city dwellings and areas with heavy traffic flow, but also additional security, acting as a second defence against intruders.

SYSTEM SUITABILITY

Dependent on the aesthetic requirements of your interior and shape of the opening, most of our window systems can be adapted and used.

Architectural Bronze Casements has experience in providing bronze secondary glazing for many listed buildings, caring for both our heritage and the environment.



Grade II* listed Christie Library at The Victoria University of Manchester: Framework allows access to original hopper windows.



The Garden Building at Lincoln College Oxford. Windows are fitted with duplex handles which provide ease of operation.



Secondary glazing to 4 metre high shaped windows in the dining hall at Grade I listed St. John's College in Oxford.



The project required English Heritage approval and won an award from the Oxford Preservation Trust.

HISTORICAL BUILDINGS

Architectural Bronze Casements have been involved in many award winning and prestigious projects. Bronze windows contribute significantly to the conservation of historic properties by maintaining aesthetics whilst improving thermal efficiency.

Freston Tower owned by the Landmark Trust. All windows were fitted with traditional leaded antique glass, supported with twisted saddle bars.





Heritage windows are fitted with traditional and decorative leaded lights.



Sir Christopher Wren's Temple Bar, the principal ceremonial entrance to the city of London reinstated in 2004.



Renovation of a Grade II Elizabethan flint and brick hall in Norfolk.



15th Century Norfolk hall fitted with double glazed Advanced windows.



Glynde Place in East Sussex.



This magnificent Elizabethan country house had replacement windows using our Heritage System fitted with traditional leaded lights.



Charming Medieval barn renovated with inward opening casements.



Ordsall Hall museum. Heritage windows with kiln distorted glass.



A challenging project designing windows with leaded lights for irregular shaped openings.



Restoration project to a Lincolnshire castle.



Inward opening traditional leaded lights with saddle bars.



Shaped casements feature traditional leaded lights set in a decorative stone surround.



Restoration in progress of a 15th Century pele tower:



Heritage fixed and opening windows with simple ironmongery.

EDUCATIONAL & COMMERCIAL

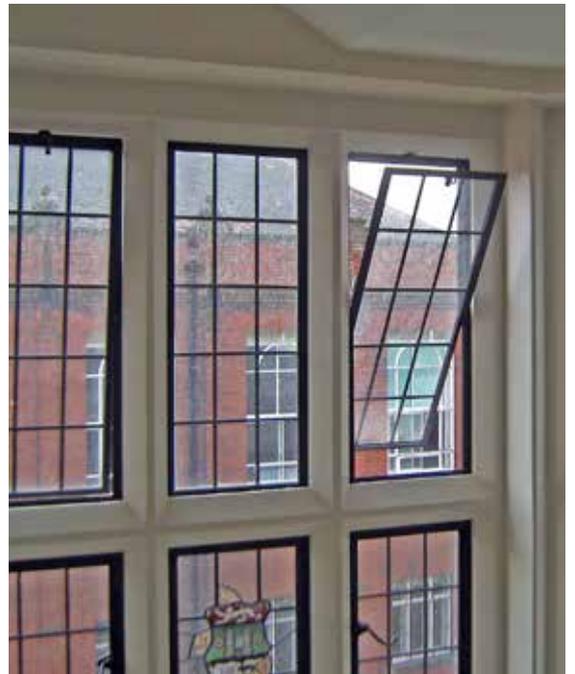
A major proportion of our educational and commercial work is carried out on Britain's leading universities, colleges and hotels, as they endeavour to make all our historic buildings more energy efficient.

Below: Clocktower at Manchester College, Oxford.





Advanced windows in the Cairns Tower at Brighton College, extended and completed to its original design in 2014.



Newcastle University featuring hopper and side opening windows with restored painted glass in leaded lights.



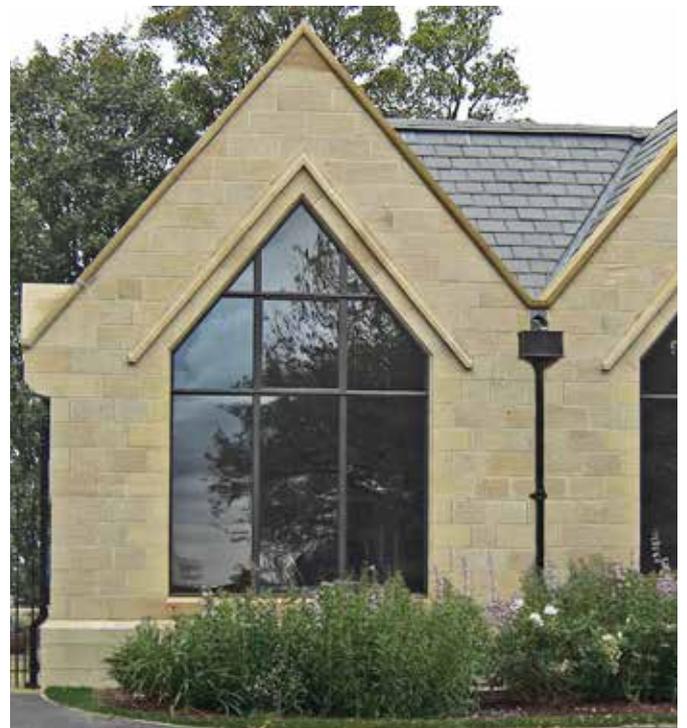
Replacement windows at Lancing College in Brighton.



Shaped Advanced windows at Oriel College, Oxford.



Above & top right: Brasenose College - University of Oxford.



Feature windows in a parish church community centre.



17th Century landmark Lough Eske Castle. Bronze casements have been fitted throughout this luxury hotel and spa in Ireland.



Old Down Country Park Hotel & Estate. A magnificent refurbishment included replacement windows throughout.



Vice Presidential suite at Lough Eske.



Contemporary interior at Old Down Country Park.



The Grand Hotel Birmingham during renovation.

Contemporary Bead

Swan Neck Stay

Manor Stay

Traditional Bead

Silicone Pointing

Part Q Security Device

Sliding Stay with Locking Nut

Scroll Handle & Bradley Backplate

Euro Plain Handle

Euro Scroll Handle

Stamford Handle

TECHNICAL INFORMATION

WORKING WITH OUR CLIENTS

Our designers have a wealth of knowledge and can visit to advise you on the correct product for your particular application and provide information on building control requirements. They are supported by dedicated technical specialists who can assist in presenting you and your builder with drawings and fixing solutions when they are not so straightforward.

WORKING WITH ARCHITECTS

Our service also encompasses assistance from our technical team who can provide advice, CAD drawings, technical information and samples to assist you in both the design stages and throughout the duration of your project.

OPTIONS AND EXTRAS

Our range of ironmongery has been designed to suit both traditional and contemporary projects and are complementary across our windows, doors and screens. We also offer a selection of products to assist you in complying with building control requirements.

Options include the following:

- Rebate and equal leg extrusions
- Choice of bronze tone
- Contemporary and traditional beading
- Window handles and backplates
- Casement stays and peg choices
- Door locking and ironmongery options
- Security devices
- Safety devices
- Ventilation options
- Saddle bars
- Bespoke hardware if required

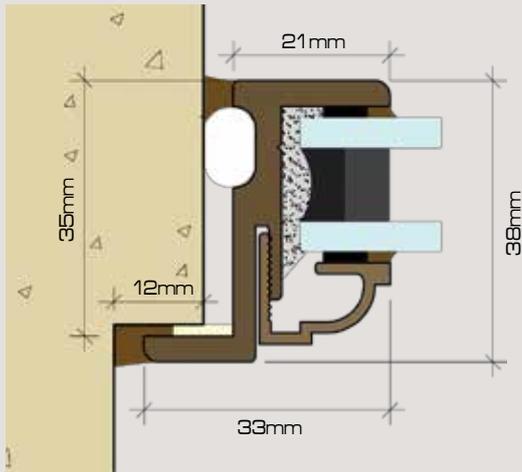


Swan Neck Stay on Fleur de Lys Peg

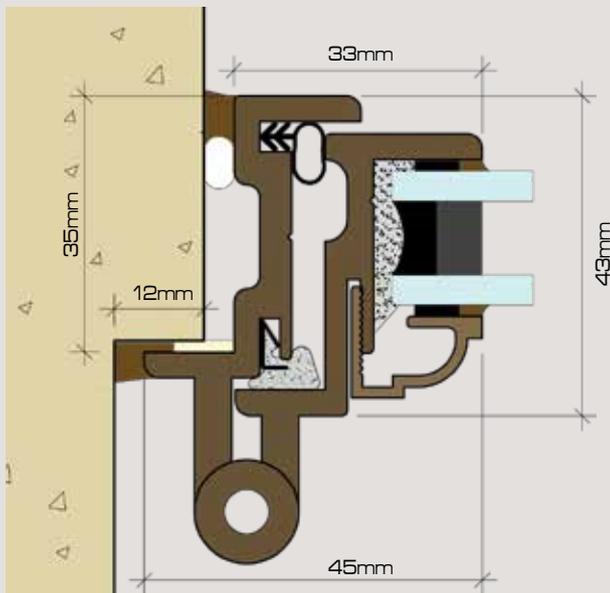
Trickle Vent

D Handle & Weystrode Backplate

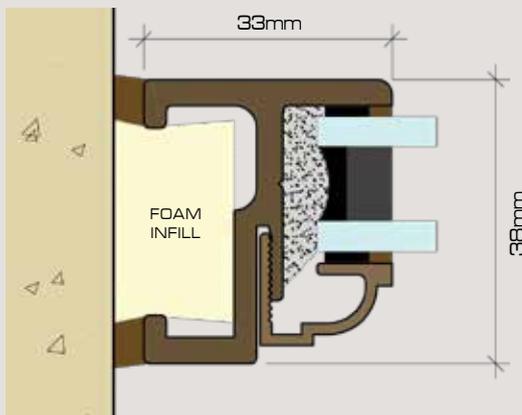
D Handle



REBATE FIXED FRAME (EXTERIOR)



REBATE OPENING FRAME (EXTERIOR)



EQUAL LEG FIXED FRAME (EXTERIOR)

ADVANCED SYSTEM

The Advanced System was designed with a decorative bronze beading which secures the glass in place, resulting in a particularly attractive profile when viewed from outside. It is designed principally for 18mm double glazed units.

The Advanced System can be designed with vertical and horizontal transoms allowing for individual double glazed units. It can also be bent to form shallow curves.

This system is available in both rebated and equal leg profiles.



The Advanced System can be fitted with either a traditional or contemporary shaped bead.

WEATHER RATING

BS 6375 Part 1

AIR PERMEABILITY	Class 4	600 Pa
WATERTIGHTNESS	Class 6A	250 Pa
WIND LOAD RESISTANCE	Class A5	2000Pa
EXPOSURE CATEGORY	2000 Special	

U-VALUE

U-value performance based on a 4/10/4mm double glazed unit made up of Super Low E, Krypton gas and warm edge spacer.

Fixed Casement Overall Value	1.6W/m ² K
Opening Casement Overall Value	1.8W/m ² K
Centre Pane Value	1.1W/m ² K

PART Q SECURITY

Tested with scroll handles, plain backplates, manor stays and Part Q casement locks. Test was carried out on windows measuring maximum 1700mm x 650mm.

Side Opening and Fixed Casements	Pass
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SAFETY DEVICES

EN14351 Part 1 Clause 4.8

The tests were carried out on side hung outward opening windows measuring 1700mm x 650mm using the restricted sliding stay and were tested excluding any additional security devices.

Load Bearing Capacity of Safety Device (wire restrictor) tested to principles of en14609:2004	Pass
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ADVANCED INWARD SYSTEM

The Advanced Inward System is a solid metal casement inspired by the continental preference for inward opening windows, allowing for the use of exterior shutters and improved access for cleaning and maintenance, whilst retaining the fine sightline of our Advanced window system.

The frame, available in equal leg sections only, incorporates double weather seals and integral drainage and is designed to take 18mm double glazed units. In most cases windows can be installed and glazed from inside the property.



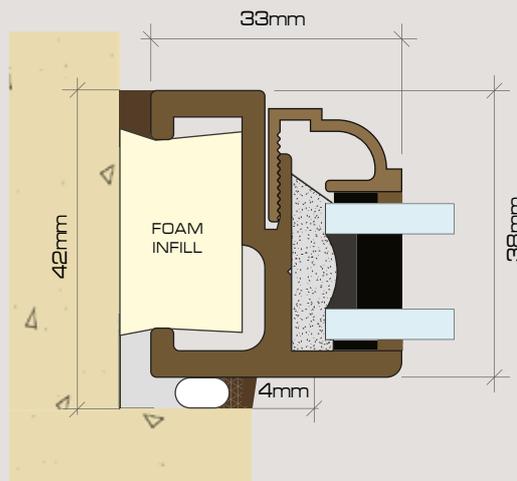
Advanced Inward System windows can be fitted with either a traditional or contemporary shaped bead.

U-VALUE

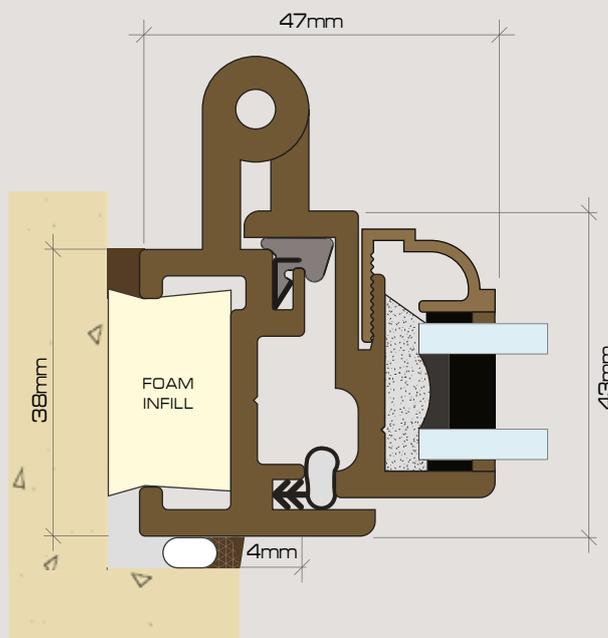
U-value performance based on a 4/10/4mm double glazed unit made up of Super Low E, Krypton gas and warm edge spacer.

Fixed Casement Overall Value	1.8W/m ² K
Opening Casement Overall Value	2.0W/m ² K
Centre Pane Value	1.1W/m ² K

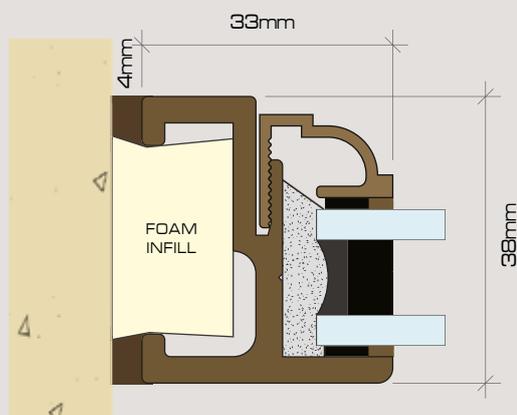
SECTIONS ACTUAL SIZE



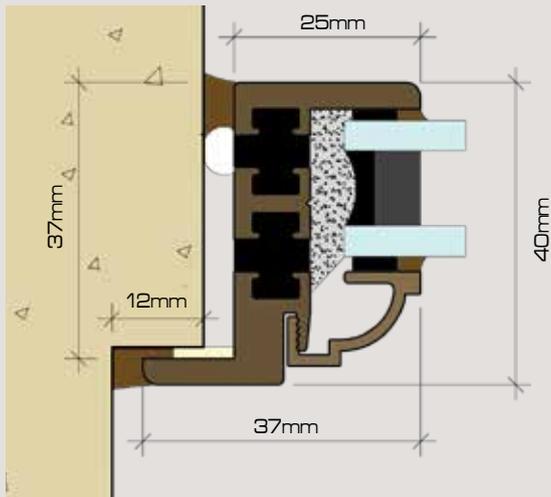
EQUAL LEG FIXED FRAME (EXTERIOR)



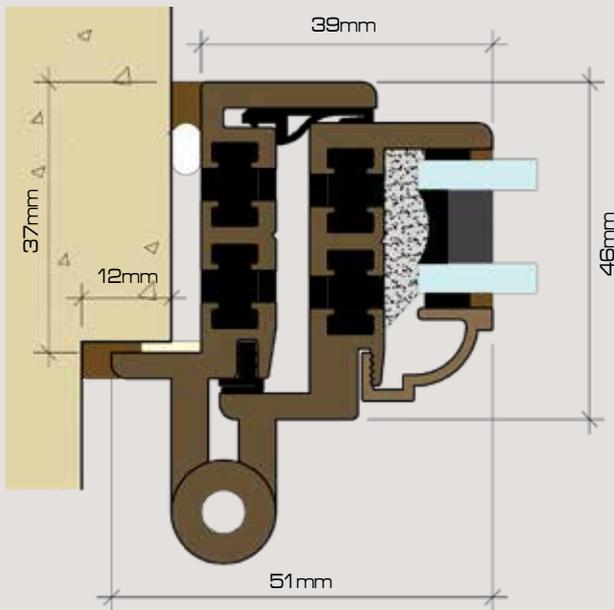
EQUAL LEG OPENING FRAME (EXTERIOR)



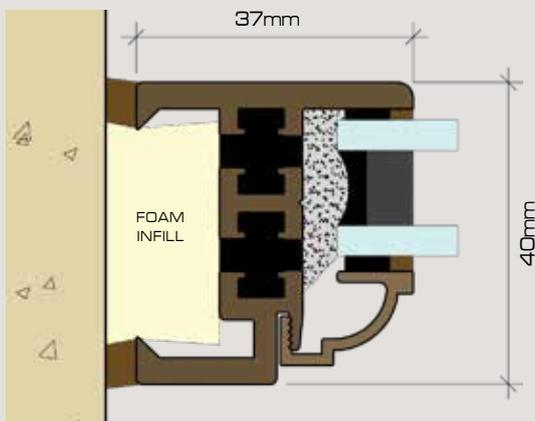
EQUAL LEG FIXED FRAME (EXTERIOR)



REBATE FIXED FRAME (EXTERIOR)



REBATE OPENING FRAME (EXTERIOR)



EQUAL LEG FIXED FRAME (EXTERIOR)

THERMABRONZE™ SYSTEM

The Thermabronze™ System has been developed to meet the demand for greater thermal performance and energy efficiency. It incorporates two thermal breaks without compromising the fine detail and sightlines of the traditional metal window.

The window is similar to the Advanced System having a decorative bronze bead to secure the glass into position and is available in both rebated and equal leg profiles.

WEATHER RATING

BS 6375 Part 1

AIR PERMEABILITY	Class 4	600 Pa
WATERTIGHTNESS	Class 8A	450 Pa
WIND LOAD RESISTANCE	Class A5	
	P1	2000
	P2	1000
	P3	3000
UK Exposure Category	2000	

U-VALUE

U-value performance based on a 4/10/4mm double glazed unit made up of Super Low E, Krypton gas and warm edge spacer.

Fixed Casement Overall Value	1.4W/m ² K
Opening Casement Overall Value	1.5W/m ² K
Centre Pane Value	1.1W/m ² K

PART Q SECURITY

Tested with scroll handles, plain backplates, minor stays and Part Q casement locks. Test carried out on windows measuring maximum 1700mm x 650mm.

Side Opening and Fixed Casements	Pass
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Tested with Part Q casement locks. Test carried out on windows measuring maximum 800mm x 800mm.

Top Opening	Pass
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SAFETY DEVICES

BS EN 14351 Part 1

The above tests are carried out on side-hung outward opening windows measuring 1700mm x 650mm using the restricted sliding stay and are tested excluding any additional security devices.

Load Bearing Capacity of Safety Device	Pass
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HERITAGE SYSTEM

The Heritage System is designed for use on historic and other period buildings where the principal requirement is for either a fine and delicate extrusion, or for a shaped window.

It is suitable where traditional leaded lights are specified, however can also accept any combination of conventional double glazing up to 16mm. The windows are traditionally pointed with silicone.

The fine profile of the Heritage extrusion is suitable for bending tighter curves. It can also be designed with vertical and horizontal transoms allowing for individual double glazed units.

This system is available in both rebated and equal leg profiles.

WEATHER RATING BS 6375 Part 1

Air	600 Pa
Water	200 Pa
Wind	2000 Pa
Exposure Category	2000 Special

U-VALUE

U-value performance based on a 4/8/4mm double glazed unit made up of Super Low E, Krypton gas and warm edge spacer.

Fixed Casement Overall Value	1.7W/m ² K
Opening Casement Overall Value	1.9W/m ² K
Centre Pane Value	1.2W/m ² K

ENHANCED SECURITY BS 7950

The above tests are carried out on side-hung outward opening windows measuring 1500mm x 650mm and are tested excluding any additional security features.

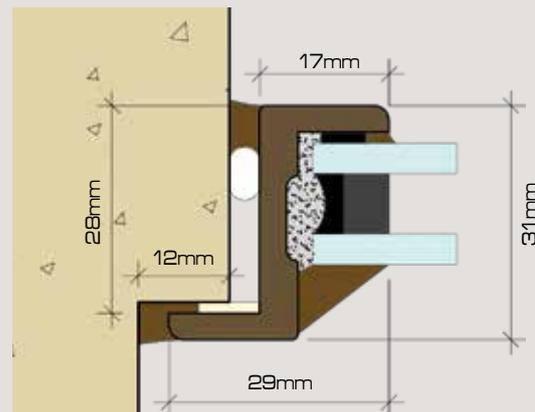
Enhanced Security Performance	Pass
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SAFETY DEVICES EN14351 Part 1 Clause 4.8

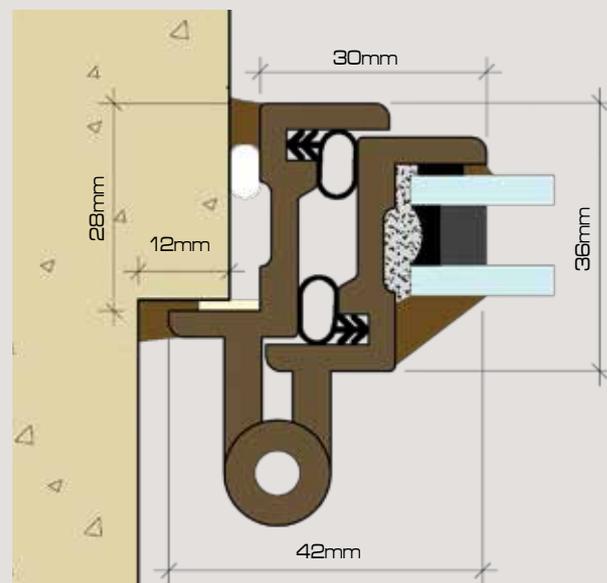
The above tests are carried out on side-hung outward opening windows measuring 1700mm x 650mm using the restricted sliding stay and are tested excluding any additional security devices.

Load Bearing Capacity of Safety Device	Pass
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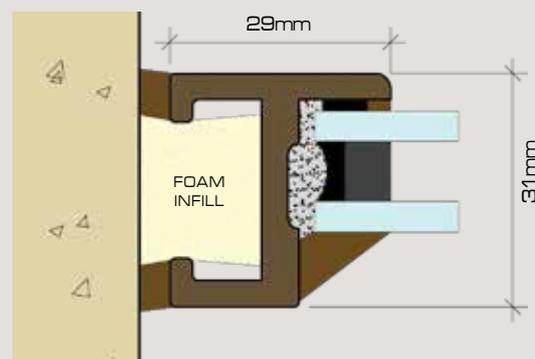
SECTIONS ACTUAL SIZE



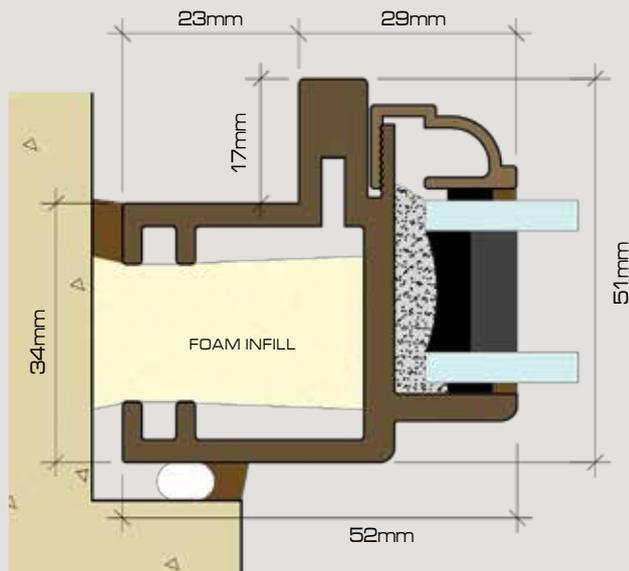
REBATE FIXED FRAME (EXTERIOR)



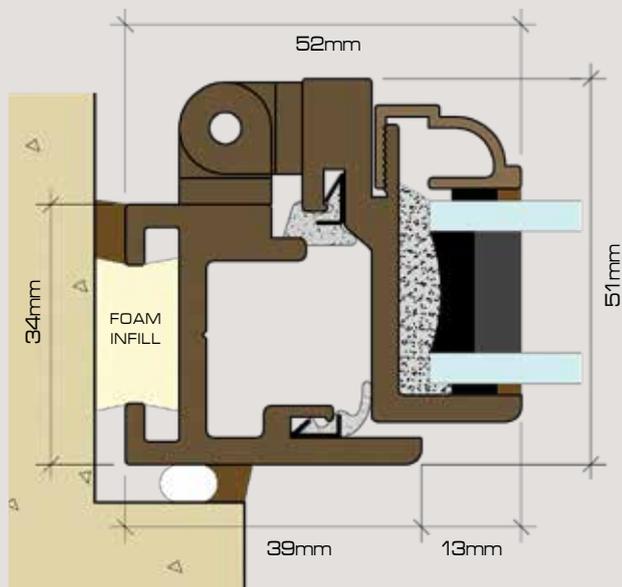
REBATE OPENING FRAME (EXTERIOR)



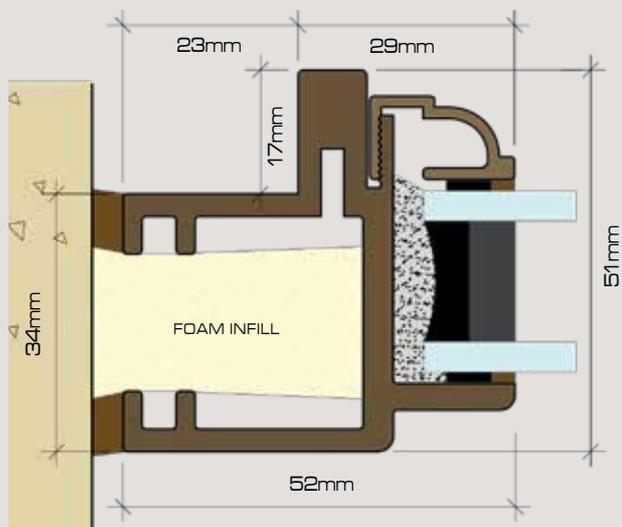
EQUAL LEG FIXED FRAME (EXTERIOR)



EQUAL LEG FIXED FRAME (EXTERIOR)



EQUAL LEG OPENING FRAME (EXTERIOR)



EQUAL LEG FIXED FRAME (EXTERIOR)

EURO INWARD SYSTEM

Many buildings in Europe have shutters and incorporate windows that open into the room. This has been the inspiration for our own Euro Inward Opening System.

The Euro Inward Opening System accepts a 24mm double glazed unit and incorporates a drainage system within the outer frame.

The principal benefit is that windows can be cleaned from the inside making them ideal for areas that are difficult to access and where conventional cleaning is not an option.

The windows can usually be fitted, glazed and beaded from the inside of the property, allowing them to be installed at any stage of a project's development.

This system can be fitted into both rebated and flush reveals but is only available as an equal leg profile. It also only comes with the traditional bead.

U-VALUE

U-value performance based on a 24mm double glazed unit of 4/16/4mm made up of Super Low-E, Argon gas and warm edge spacer.

Fixed Casement Overall Value	2.4W/m ² K
Opening Casement Overall Value	2.4W/m ² K
Centre Pane Value	1.2W/m ² K

STANDARD BRONZE DOORS

Our Standard Bronze Doors fit within a bronze frame with a bronze threshold.

Doors can be produced inward and outward opening, in a variety of styles including plain, with vertical or horizontal transoms or with deep bottom rails. The bronze doors can also be made with a curved or angled head.

The doors are principally designed to accept 24mm double glazed units. The glazing is secured into place with a decorative bronze beading to complement our Advanced window system.

The extended leg can be shortened for installation into flush reveals or for inward opening doors.



Bronze doors can be fitted with either a traditional or contemporary shaped bead.

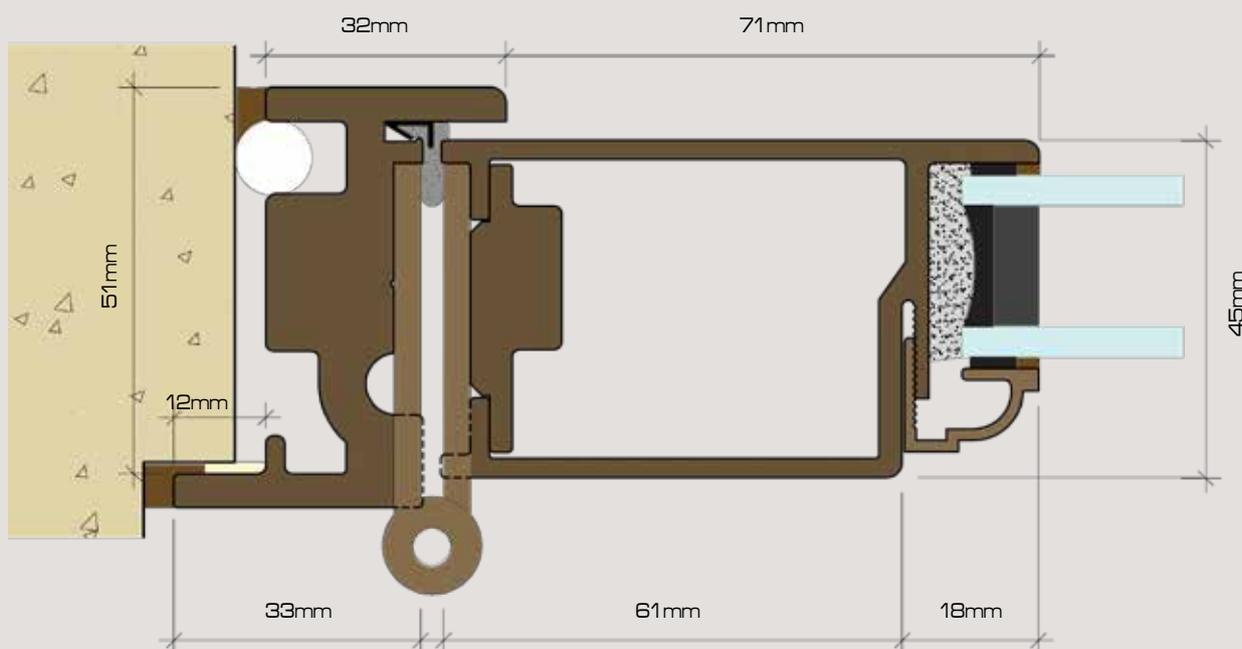


U-VALUE

U-value performance based on an 18mm sealed double glazed unit made up of 4mm clear tough/16mm 90% Krypton filled cavity/4mm clear tough Super Low E with warm edge spacer:

Single door overall value	2.6W/m ² K
Double door overall value	2.9W/m ² K
Centre pane value	1.2W/m ² K

SECTION ACTUAL SIZE



OPENING DOOR (EXTERIOR)

SINGLE CLAD DOORS

Bronze Single Clad Doors combine the durability of bronze with the warmth of timber:

The timber frame can be made from either Oak, Douglas Fir or Sapele. We offer a selection of stains and period paint colours which provides an opportunity for co-ordination with interior design options.

Externally, the doors are clad with bronze and are designed to accept double glazed units up to 18mm. The glazing is secured into place with a decorative bead to complement our bronze windows.

They are fitted with a multi-point locking system and have the advantage of being able to be manufactured to a greater height than our Standard Bronze Door due to the extra support provided by the timber.



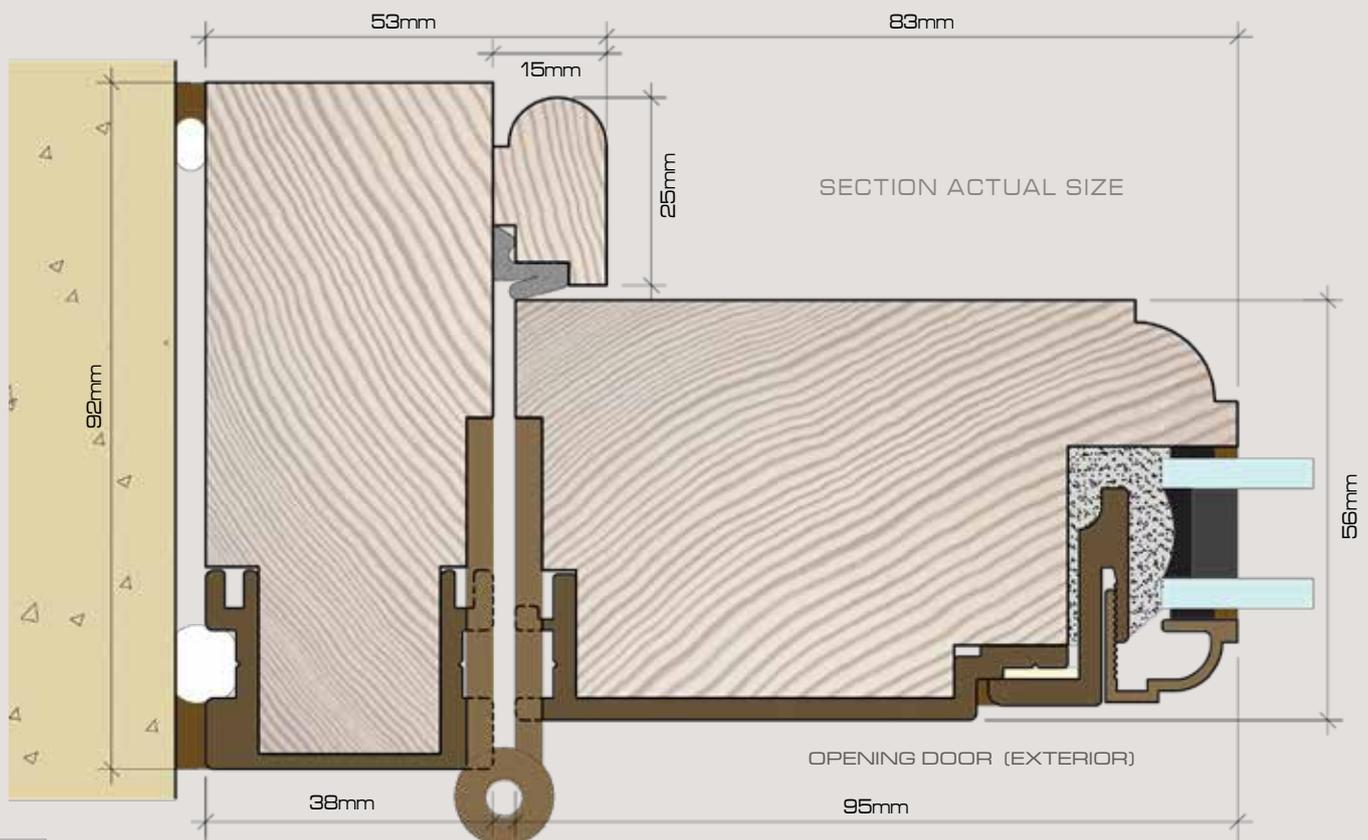
Single Clad Doors can be fitted with either a traditional or contemporary shaped bead.



U-VALUE

U-value performance based on an 18mm sealed double glazed unit made up of 4mm clear tough/10mm 90% Krypton filled cavity/4mm clear tough Super Low E with warm edge spacer:

Single Door Overall Value	1.7W/m ² K
Double Door Overall Value	2.4 W/m ² K
Centre Pane Value	1.1W/m ² K



DOUBLE CLAD DOORS

Bronze Double Clad Doors combine a bronze door with the benefit of enhanced thermal efficiency from an inner timber frame, providing a fully thermally broken system.

The doors are principally designed to be fitted into a flush reveal and can be inward or outward opening, with horizontal and vertical transoms.

Doors will accept double glazed units up to 18mm. The glass is secured into place with a decorative bead. All doors are fitted with a multi-point locking system and a choice of handles.



PART Q SECURITY

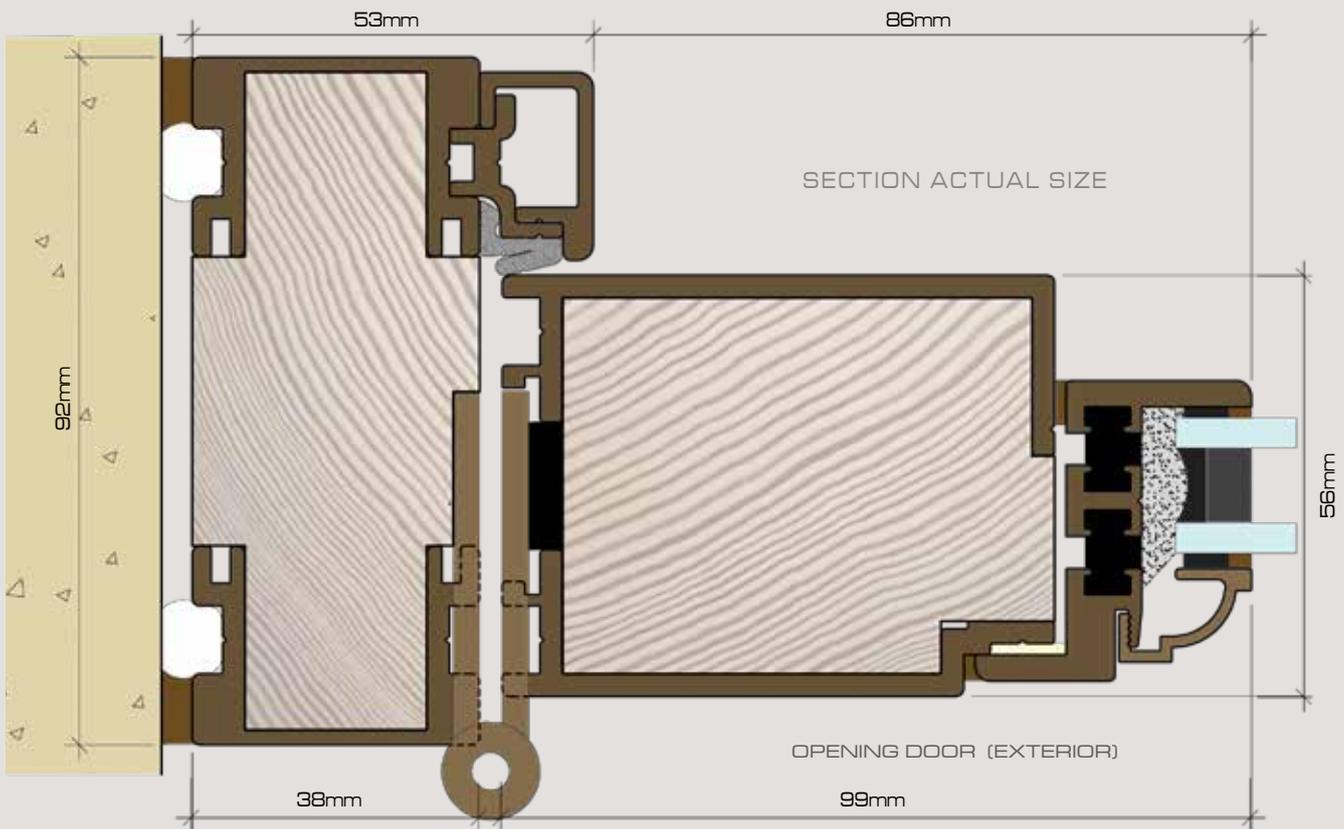
Below test carried out on a pair of doors measuring maximum 1792mm x 2579mm.

Outward opening pair of doors with or without sidelights, featuring standard iron mongery.	Pass
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U-VALUE

U-value performance based on a 18mm sealed double glazed unit made up of 4mm clear tough/10mm 90% Krypton filled cavity/4mm clear tough Super Low E with warm edge spacer:

Single Door Overall Value	2.1W/m ² K
Double Door Overall Value	2.3W/m ² K
Centre Pane Value	1.1W/m ² K



TIMBER DOORS WITH BRONZE INSERTS

Our Timber Doors can be made in either European Oak, Douglas Fir or Sapele in a range of finishes, offering a selection of stains and period paint colours to co-ordinate with interior design.

They can be produced as either single or double openers in three profiles - Belton, Old Mill and Hardwick. They can be designed with vertical or horizontal transoms or with deep mid rails, and can also be used within a folding door system.

Generally doors are hung with projection hinges and are fitted with decorative handles and shoot bolts or alternatively can be fitted with a multi-point locking system. Sliding doors have their own specialist ironmongery.



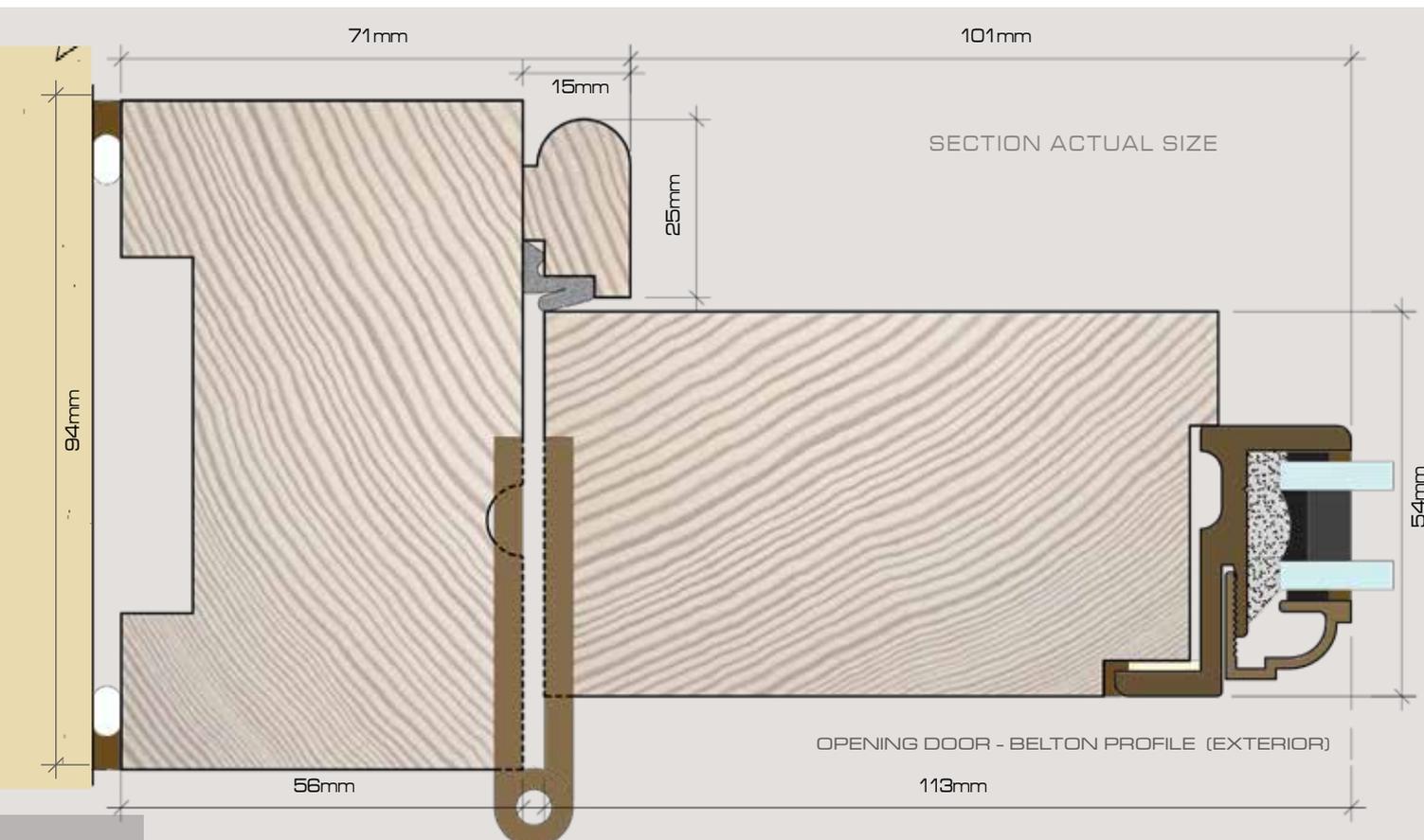
Timber Doors with Bronze Inserts can be fitted with either a traditional or contemporary shaped bead.



U-VALUE

U-value performance based on an 18mm sealed double glazed unit made up of 4mm tough/10mm 90% Krypton filled cavity/4mm tough Super Low E with warm edge spacer.

Single Door Overall Value	1.5W/m ² K
Double Door Overall Value	1.6W/m ² K
Centre Pane Value	1.1W/m ² K
U-values calculated in accordance with BS EN ISO 10077-1:2006. Worst case system value 2.0W/m ² K based upon single or double doors including glazing bars.	

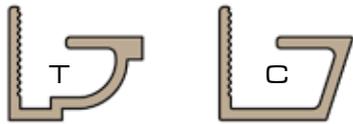


SLIMLINE DOOR SYSTEM

This is a solid system which can be combined with Advanced fixed panels to form either internal or external screens. They can be fitted into either rebated or flush openings and open inwards or outwards.

The doors can be fitted with double glazed units up to 20mm and the glazing is secured into place with a decorative bronze bead.

A variety of hardware options are available for this system.



The Slimline door system can be fitted with either a traditional or contemporary shaped bead.

Please note that this system and the options available to you are dependent on what building regulations will allow, manufacturing size limits, design configurations and exposure to weather:

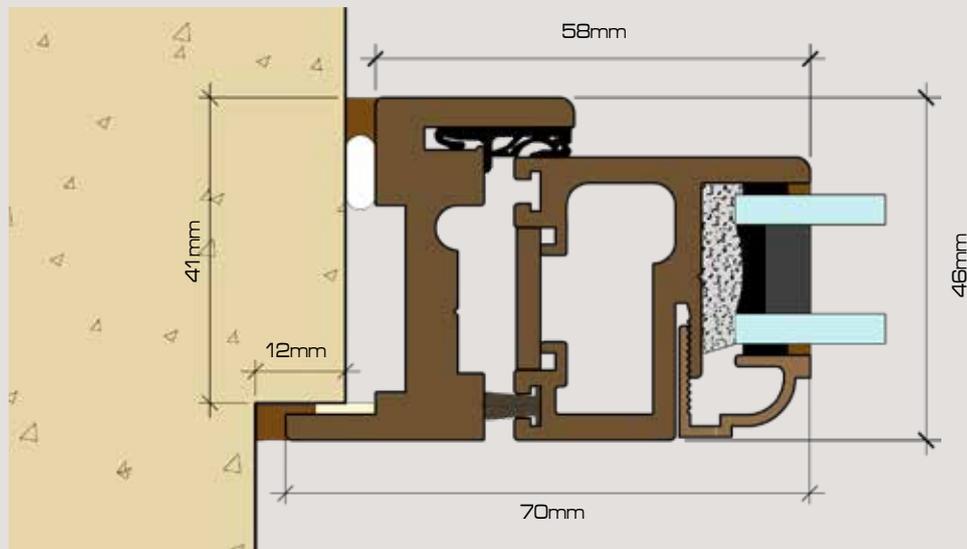


U-VALUE

U-value performance based on an 20mm sealed double glazed unit made up of 4mm tough/12mm 90% Krypton filled cavity/4mm tough Super Low E with warm edge spacer

Single door overall value	2.1W/m ² K
Double door overall value	2.1W/m ² K
Centre pane value	1.1W/m ² K
U-values calculated in accordance with BS EN ISO 10077-1:2006. Worst case system value 2.5W/m ² K based upon single or double doors including glazing bars.	

SECTION ACTUAL SIZE



OUTWARD OPENING DOOR (EXTERIOR)

TIMBER FRAMES FOR WINDOWS
EIGHT STANDARD PROFILES AVAILABLE



TUDOR HOUSE



TUDOR HOUSE LARGE



HARDWICK



MINSTER



OLD MILL



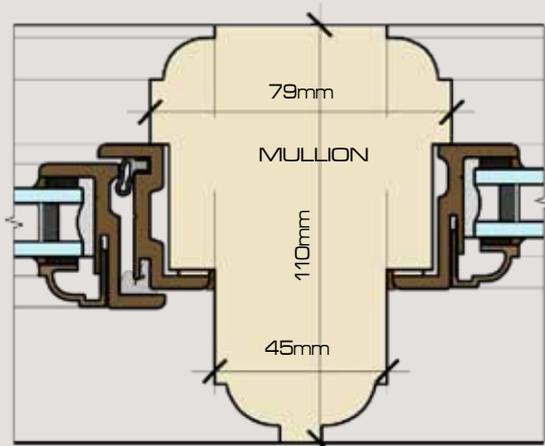
ALMS HOUSE



ERMINE



TYTHE



SECTION THROUGH OLD MILL PROFILE

TIMBER FRAMES

We are able to supply timber surrounds for our windows utilising all the latest CNC equipment.

Frames can be made in a variety of timbers depending on the finish required. Generally these are Douglas Fir or Sapele for painted surrounds and European Oak for stained and treated finishes.

We have several standard profiles available to suit the period and style of your project. We can also produce specific sections should you have any specialist requirements.

We offer a choice of colours and finishes for both painted and stained frames.



GLASS OPTIONS

In order to meet the demands of conservation officers, current Building Regulations and the exacting specifications of our clients, we can supply a comprehensive range of units from traditional leaded lights utilising handmade glass, to high performance double glazed units providing excellent thermal values.

Having our own glass department and adopting a flexible approach, allows us to consider all possibilities when producing the glazing for your bronze casements and doors.



STAINED GLASS & RESTORATION WORK

We have worked closely with an independent glass artist for many years on more sensitive restoration projects.

This frequently involves the careful removal of original antique leaded lights from site before being assessed and restored. His painting skills are outstanding and he has the reputation of being one of the country's leading glass painters.

New ideas can also be developed and translated into beautiful works of art in stained glass for your bronze casements, creating something unique, personal to you and which can be enjoyed and admired.



MEASURING & SITE SURVEYS

For some of our work, we manufacture windows and doors to measurements supplied by our clients, their builders or architects.

However, some clients like to make use of our Site Survey service. A Project Manager will visit and discuss with you or your builder the requirements for the openings and any alterations that may be required, or how we can adapt our systems to suit more complicated openings.

For shaped windows templates may need to be made to ensure a perfect fit. Our site managers are experienced in producing templates and this may be an option for your own project.



INSTALLING & INSTALLATION SERVICE

For the competent and experienced installer, our products come with either standard fitting instructions or full working drawings. Our team can advise on the correct fitting procedure for more complex items.

Alternatively, we can offer an on-site demonstration to your own installers if they feel this would be beneficial. This is carried out by a Project Manager.

Many clients prefer to take up our Installation Service which provides a Project Manager and a dedicated team of skilled and experienced fitters. This provides peace of mind for clients on projects of all sizes.

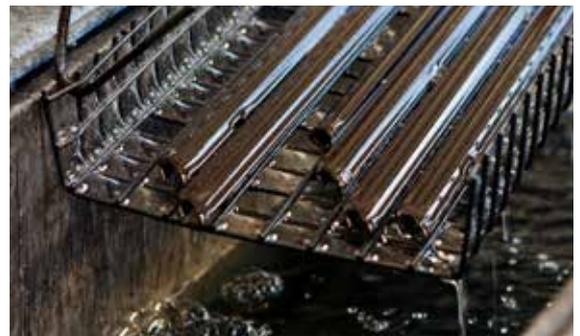
OUR COMPANY

Architectural Bronze Casements, alongside our sister company, Vale Garden Houses, who specialise in bespoke conservatory and orangery projects, employ around 200 permanent staff and own four impressive sites. The building below shows the main offices and workshops at Belton Park, equipped with cutting edge technology and equipment.

Both companies are family run and hold traditional values, priding ourselves on our personal service and level of craftsmanship. We supply and install products around the world.

We are associated with many accredited organisations, each endorsing our continued commitment to the quality of our products and operations within the workplace and on site.

We are also serious about our environmental credentials and openly demonstrate our commitment from purchasing through to recycling. By having a considered and controlled approach to all our processes, we enable our customers to make a socially and environmentally responsible purchasing choice.



VISIT US

We encourage you to visit our showrooms to experience first-hand the quality and detail of our bronze products. We can show you around our factory where you can see our windows, doors and screens throughout the various stages of manufacture. This valuable and worthwhile experience will help you fully appreciate the term 'Handmade'. It is also an ideal opportunity to run through your own project requirements and show you the systems and options available to you.





DEVELOPING IDEAS

The picture on the left shows our new Ashdowne system. Following extensive client consultation, it has been designed with bespoke extrusions for a prestigious project with very particular structural and aesthetic requirements.

In a continuous effort to improve our product and meet new challenges, our products are subject to ongoing technical review and development. We therefore reserve the right, at any time, to change product specifications, construction methods or manufacturing processes.

Due to the bespoke nature of our products and the wide range of applications in which they are used, we request that our clients ensure all relevant permissions are sought, building regulations considered and technical requirements are met before placing an order.

